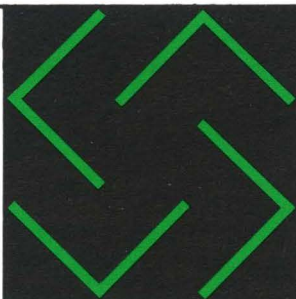


*Subsystem Control Unit
Token-Ring Network 3270 Gateway
Supplement to
3270 Introduction*



*IBM 3270
Information Display
System*

IBM

Preface

This supplement supports the general announcement of the IBM 3174 Subsystem Control Unit Token-Ring Network 3270 Gateway. The first section, "IBM Token-Ring Network 3270 Gateway Feature," describes the gateway feature. The second section, "3174 Subsystem Control Unit Models 3R and 53R," briefly describes the differences between the Models 3R and 53R.

For more information regarding the 3174 Subsystem Control Unit, see the *IBM 3270 Information Display System: Introduction*, GA27-2739.

First Edition (June 1986)

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Contents

IBM Token-Ring Network 3270 Gateway Feature	1
Token-Ring Adapter	2
Microcode	2
3174 Relationship	2
Program Support	2
Problem Determination	3
3174 Subsystem Control Unit Models 3R and 53R	3

Figures

1. IBM Token-Ring Network	1
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IBM Token-Ring Network 3270 Gateway Feature

The IBM Token-Ring Network 3270 Gateway feature, a feature of the IBM 3174 Subsystem Control Unit, provides for data passage between a systems network architecture (SNA) host processor and the work stations and subsystem control units on the IBM Token-Ring Network. (See Figure 1.) As many as 140 work stations or subsystem control units attached to the ring can be defined to VTAM in the host. The customer may, for performance reasons, elect to limit the number of work stations or control units that concurrently pass data to a host, through the gateway, to a number less than the maximum. The gateway feature does not interfere with the ability of ring-attached devices to communicate with each other on the ring; nor does it affect nonring devices that are directly attached to the 3174 Subsystem Control Unit Model 1L.

The addresses of work stations and of 3174 subsystem control units attached to the token ring are mapped to unique host subchannel addresses. One sub-channel address is also required for the 3174 in which the gateway feature is installed.

The gateway feature comprises:

- A token-ring adapter in a 3174 Model 1L
- Utility and Control diskettes
- Cable.

Additional storage is needed with this feature.

The Token-Ring Network 3270 Gateway feature can be ordered with the 3174 Model 1L or installed by the customer.

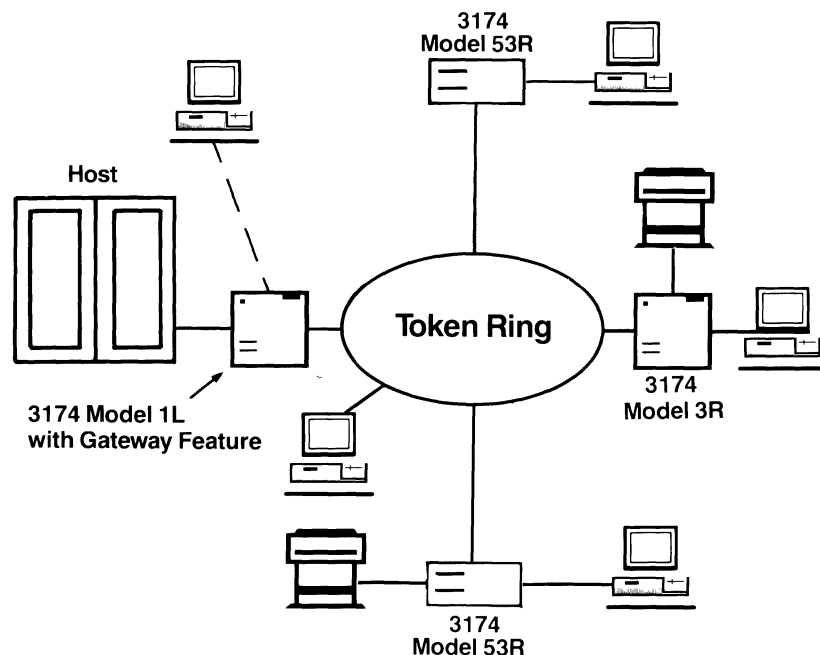


Figure 1. IBM Token-Ring Network

Token-Ring Adapter

The token-ring adapter serves as the attachment between the 3174 Model 1L and the token-ring network. It provides for:

- Transfer of data
- Detection of ring and protocol errors.

Microcode

New utility and control diskettes are provided with the Token-Ring Network 3270 Gateway feature. All configuration support for 3174 functions applicable to the SNA Model 1L are included.

The utility diskette provides the ability to:

- Customize the 3174 subsystem control unit
- Assign a ring address for the control unit containing the gateway feature
- Specify the addresses of work stations and control units attached to the token ring.

The control diskette contains the microcode needed to connect and manage a token-ring network downstream from the control unit.

The screen images used for customizing the token ring have the same format and interface used for customizing the 3174.

3174 Relationship

The Token-Ring Network 3270 Gateway feature does not affect normal 3174 functions for the terminals attached to the control unit terminal/distributed function terminal (CUT-DFT) interface. No changes are required in the host application program for the gateway feature.

Program Support

The Token-Ring Network 3270 Gateway feature is supported by the following host-related programs:

- Network Problem Determination Application (NPDA)
- Virtual Telecommunications Access Method (VTAM).

NPDA and VTAM run under the following operating systems:

- Multiple Virtual Storage (MVS)
- Virtual Machine (VM)
- Virtual Storage Extended (VSE).

Problem Determination

The Token-Ring Network 3270 Gateway feature provides ring-related error processing for the token ring, as well as extensions of the following 3174 problem determination functions:

- Alerts
- Online tests
- Offline tests
- Error logging
- Trace.

In addition, host notification is provided for token-ring error-threshold conditions.

3174 Subsystem Control Unit Models 3R and 53R

The 3174 Subsystem Control Unit Models 3R and 53R provide for token-ring communication to an SNA host. Communication to the host is through a gateway that can be either an IBM 3725 Communication Controller with the Network Control Program Token-Ring Interface (NTRI) feature, or a 3174 Model 1L with the Token-Ring Network 3270 Gateway feature.

The 3174 token-ring adapter serves as the attachment to the IBM Token-Ring Network.

A maximum of 32 terminals can be attached to a 3174 Model 3R; a maximum of 16 terminals can be attached to a 3174 Model 53R.

The 3174 Models 1R and 2R can be converted to a Model 3R with a customer-installed model-conversion package. No additional storage is needed to make this conversion. IBM assistance is available.

The 3174 Model 3R conversion package includes:

- A token-ring adapter
- Utility and control diskettes
- Cable.

The Token-Ring Network 3270 Gateway feature can be installed only on a 3174 Model 1L.

**IBM 3174 Subsystem Control Unit
Token-Ring Network 3270 Gateway**

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